

Claims

1. A mortise trim plate having a front side and a backside, comprising:
 - a lever handle mounted through said trim plate front side for extending and retracting a latch bolt within a mortise latch lock case;
 - a thumb lever mounted through said trim plate front side for extending and retracting a dead bolt within said mortise latch lock case;
 - an electroluminescent lighted sign having an overall thickness less than or equal to the depth of said trim plate; and
 - an aperture through said trim plate for viewing said electroluminescent lighted sign.
2. The mortise trim plate of claim 1 wherein said electroluminescent lighted sign comprises:
 - a lens structure;
 - a lettering strip supported within said lens structure; and
 - an electroluminescent strip supported within said lens structure;such that said lens structure secures said electroluminescent strip and said lettering strip to said aperture from said trim plate backside.
3. The mortise trim plate of claim 2 wherein said lens structure comprises an outer lens and an inner lens mechanically attached to one another with said electroluminescent strip and said lettering strip sandwiched therebetween.
4. The mortise trim plate of claim 3 wherein said outer lens includes at least one protruding shape to positively locate said outer lens within said aperture.
5. The mortise trim plate of claim 2 wherein said lens structure comprises a polycarbonate plastic material.

6. The mortise trim plate of claim 2 wherein said lettering strip comprises reverse printed clear spaces of alphanumeric characters and an opaque background such that said alphanumeric characters allow emitted light to pass through when power is applied to said electroluminescent strip.

7. The mortise trim plate of claim 3 further comprising a shaded or reflective film added within said lens structure between said outer lens and said lettering strip.

8. The mortise trim plate of claim 3 wherein said lettering strip is attached to said outer lens by adhesive, friction, or mechanical fastener.

9. The mortise trim plate of claim 3 wherein said inner lens provides electrical insulation and mechanical support for said electroluminescent strip.

10. A mortise latch lock comprising:

- a case including a latch bolt and a dead bolt;

- a trim plate having a front side and a backside, said trim plate including:

- a lever handle mounted through said trim plate front side for extending and retracting said latch bolt within said case;

- a thumb lever mounted through said trim plate front side for extending and retracting said dead bolt within said case;

- an electroluminescent lighted sign having an overall thickness less than or equal to the depth of said trim plate; and

- an aperture through said trim plate for viewing said electroluminescent lighted sign; and

- an inverter circuit mounted to said case and providing electrical power to said electroluminescent lighted sign.

11. The mortise latch lock of claim 10 wherein said inverter circuit receives ± 24 volts ac or ± 24 volts dc power and converts said power to illuminate said electroluminescent lighted sign.

12. The mortise latch lock of claim 10 including a switch to toggle said electroluminescent sign ON when said mortise latch lock is in a locked position.

13. The mortise latch lock of claim 12 wherein said switch toggles said electroluminescent lighted sign ON when said dead bolt is in a locked position.

14. The mortise latch lock of claim 10 wherein said electroluminescent lighted sign comprises:

- a lens structure;

- a lettering strip supported within said lens structure; and

- an electroluminescent strip supported within said lens structure;

such that said lens structure secures said electroluminescent strip and said lettering strip to said aperture from said trim plate backside.